

## INFORMATION SHEET

ORDER NO.  
COUNTY OF TULARE  
FOR OPERATION  
WOODVILLE MUNICIPAL SOLID WASTE LANDFILL  
TULARE COUNTY

The County of Tulare (hereafter Discharger) owns and operates a municipal solid waste landfill (landfill) about four miles northwest of Woodville.

The landfill consists of two existing, contiguous waste management units (Units). Unit IA is unlined and covers 57 acres and Unit IB, constructed with an engineered alternative composite liner covers eight acres. The existing Units are currently classified as Class III landfills that accept or accepted municipal solid waste in accordance with Title 27, California Code of Regulations (CCR), Section 2005, et seq.

The climate in the southern San Joaquin Valley is semi-arid, with hot, dry summers and cool winters. The facility receives an average of 11.34 inches of precipitation per year. The mean pan evaporation is 70.7 inches per year. The 100-year, 24-hour precipitation event is estimated to be 3.38 inches, based on observations at the Exeter Station. The landfill is not within a 100-year floodplain based on the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map, Community-Panel Number 0650660825E; Panel 825 of 1375.

The landfill is located on the westward dipping, eastern limb of the asymmetrical basin of the San Joaquin Valley. Sediments ranging in age from Jurassic to Holocene fill the geosynclinal trough. The site overlies a basement complex of pre-Tertiary age metasediments, plutonics, and ultramafics. Sequentially overlying the basement complex are approximately 1,000 to 3,500 feet of consolidated and unconsolidated Tertiary marine deposits, continental deposits, and unconsolidated Quaternary alluvium. Of significance to the site are the Quaternary age floodplain deposits of Lewis Creek, which consist of moderately permeable, interbedded, and laterally discontinuous poorly-sorted gravels, fine-to-medium-grained sands, sandy-silts, silts, and clay.

The landfill is in a topographically flat region of the San Joaquin Valley. Surface drainage is westerly toward Elk Bayou in the Kaweah Delta Hydrologic Area (558.10) of the Tulare Lake Hydrologic Basin. There are no perennial streams in the immediate vicinity of the landfill. The designated beneficial uses of surface waters on the valley floor, as specified in the *Water Quality Control Plan for the Tulare Lake Basin, Second Edition* (Basin Plan), are agricultural supply, industrial service and process supply, water contact and non-contact water recreation, warm fresh water habitat, preservation of rare, threatened and endangered species, and groundwater recharge.

There are 28 municipal, domestic, industrial, or agricultural groundwater supply wells within one mile of the site. No surface springs or other sources of groundwater supply have been observed. A domestic well (well identification number 20S/25E-35G1) is within 1,000 feet of the southern boundary of the waste management facility. The first encountered groundwater is about 101 to 116 feet below the native ground surface during

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the spring and about 113 to 130 below the native ground surface during the summer. Groundwater elevations range from 206 feet MSL to 208 feet MSL during the spring and about 196 feet MSL to 194 feet MSL in the summer. The groundwater is unconfined. The depth to groundwater fluctuates seasonally as much as 15 feet. Monitoring data indicates background groundwater quality has an electrical conductivity (EC) ranging between 1,200 and 1,300 micromhos/cm, with total dissolved solids (TDS) ranging between 860 and 790 mg/l.

Groundwater elevation data from 2003 through 2004 indicates that a southwest-northeast trending depression exists beneath the center of the waste management facility. Northwest of the waste management facility, the direction of groundwater flow is toward the southeast. Southeast of the waste management facility, the direction of groundwater flow is toward the northwest. The average groundwater gradient ranges between 0.002 and 0.007 feet/foot north of the waste management facility and between 0.002 and 0.004 feet/foot south of the waste management facility, depending on the season. Information regarding the average groundwater velocity is not currently available.

The designated beneficial uses of the groundwater, as specified in the Basin Plan, are domestic and municipal, agricultural, and industrial supply.

A release from the existing Units has been detected in groundwater. Groundwater monitoring of the unconfined groundwater zone has detected numerous non-naturally occurring volatile organic compounds (VOCs) along the point of compliance of the landfill including: 1,1-DCA; 1,1-DCE; PCE; TCE; cis-1,2-DCE; trans-1,2-DCE; benzene; vinyl chloride; Freon 11; Freon 12; methylene chloride; bromochloromethane; chloroform; and total xylenes. Statistical analysis of inorganic waste constituents has determined that bicarbonate, calcium, carbonate, electrical conductivity (EC), iron, magnesium, nitrate, potassium, sulfate, and total dissolved solids (TDS) have exceeded their respective background concentrations in groundwater.

Available detection monitoring data indicates that 1,1-DCA, TCE, trans-1,2-DCE, benzene, 1,2,4-trichlorobenzene, 1,2-dichloropropane, ethylbenzene, acrolein, vinyl chloride, methyl bromide, PCE, toluene, trichlorofluoromethane, dichlorodifluoromethane, methylene chloride, acetone, chloroform, and xylenes have been detected on one or more occasions in vadose zone soil pore gas samples. The organic compounds PCE, benzene, dichlorodifluoromethane, trichlorofluoromethane, methylene chloride, TCE, xylenes, and toluene are occasionally detected above their respective PQLs.

The Regional Board adopted Cleanup and Abatement Order No. 98-706 on 18 March 1998. Order No. 98-706 requires the Discharger to initiate and complete an Evaluation Monitoring Program and initiate and complete a Corrective Action Program in accordance with Title 27 CCR Section 20430(a)-(c). The Discharger submitted a work plan and time schedule for completing the Evaluation Monitoring Program on 14 May 1998 in accordance with Task 16.a of Order No. 98-706. The Executive Officer approved

the work plan and time schedule for completing the Evaluation Monitoring Program in a 24 December 1998 letter. The Discharger initiated the Evaluation Monitoring Program work plan in accordance with Task 16.b of Order No. 98-706.

Volatile organic compounds are often detected in a release from a landfill, and are the primary waste constituents detected in groundwater beneath a municipal solid waste landfill. Since volatile organic compounds are not naturally occurring, and thus have no background value, they are not amenable to the statistical analysis procedures contained in Title 27 CCR for the determination of a release of wastes from a Unit. Title 27 CCR does provide for the non-statistical evaluation of monitoring data that will provide the best assurance of the earliest possible detection of a release from a Unit. However, Title 27 CCR does not specify a specific method for non-statistical evaluation of monitoring data. The Board may specify a non-statistical data analysis method pursuant to Title 27 CCR Section 20080(a)(1) of. In order to provide the best assurance of the earliest possible detection of a release of non-naturally occurring waste constituents from a Units, this Order specifies a non-statistical method for the evaluation of monitoring data.

The specified non-statistical method for evaluation of monitoring data in this Order provides two criteria (or triggers) for making the determination that there has been a release of waste constituents from a Unit. The presence of two waste constituents above their respective method detection limit (MDL), or one waste constituent detected above its practical quantitation limit (PQL), indicates that a release of waste from a Unit has occurred. Following an indication of a release, verification testing will be conducted to determine whether there has been a release from the Unit, or there is a source of the detected constituents other than the landfill, or the detection was a false detection. Although the detection of one waste constituent above its MDL is sufficient to provide for the earliest possible detection of a release in accordance with Title 27 CCR, the detection of two waste constituents above the MDL as a trigger is appropriate due to the higher risk of false-positive analytical results and the corresponding increase in sampling and analytical expenses from the use of detecting one waste constituent above its MDL as a trigger.

On 9 October 1991, the United States Environmental Protection Agency (USEPA) promulgated regulations (Title 40, Code of Federal Regulations, Parts 257 and 258, "federal municipal solid waste [MSW] regulations" or "Subtitle D") that apply, in California, to dischargers who own or operate Class II or Class III landfill units at which municipal solid waste is discharged. The majority of the federal MSW regulations became effective on the "Federal Deadline", which was on 9 October 1993. With the issuance of Resolution No. 93-62, the State Water Resources Control Board established a statewide policy for the regulation of discharges of municipal solid wastes consistent with Subtitle D. Following the issuance of Resolution No. 93-62, the USEPA deemed the State of California to be an approved state, meaning that compliance with the applicable state regulations constitutes compliance with the corresponding portions of the federal

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Subtitle D regulations. These requirements are consistent with Resolution No. 93-62 and Subtitle D, and implement the appropriate state regulations in lieu of Subtitle D. The Discharger also needs to comply with all applicable provisions of Subtitle D that are not implemented through compliance with this Order or Title 27 CCR.

The waste discharge requirements are being revised for the purpose of making minor modifications to the prohibitions, specifications, and monitoring and reporting program. Therefore, the action to revise waste discharge requirements for the existing Units at this landfill is exempt from the provisions of the California Environmental Quality Act (CEQA), Public Resource Code Section 21000, et seq., and the CEQA guidelines, in accordance with Title 14, CCR, Section 15301.

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